



C20-CM-WD-CAI-AIM-CCB-CCN-106
7026

BOARD DIPLOMA EXAMINATION, (C-20)

MAY—2023

DCME - FIRST YEAR EXAMINATION

PROGRAMMING IN C

Time : 3 Hours]

[Total Marks : 80

PART—A

3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. Define keyword and list any three keywords.
2. What are the identifiers? List the rules for naming an identifier.
3. What is meant by operator precedence?
4. What is the purpose of getchar () and putchar () functions?
5. List various looping statements in C.
6. Differentiate between break and continue statements.
7. Declare two-dimensional array with syntax.
8. Define string and list any three string functions.
- * 9. List the elements of user defined function.
- * 10. Define file. Write the syntax to declare file pointer.

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PART—B

8×5=40

- Instructions :** (1) Answer **all** questions.
 (2) Each question carries **eight** marks.
 (3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

11. (a) Explain the structure of a C program with a neat sketch.

(OR)

(b) Explain the steps involved in executing the C program with a neat sketch.

12. (a) Explain relational and logical operators in C.

(OR)

(b) Explain the steps for evaluating logical expression. Evaluate the following logical expression and write the result. Assume $p = 5$, $q = 2$, $r = 3$, $s = 1$.

$(p - q) == r \parallel p > (r * s) \&\& q < (p / r)$.

13. (a) Explain if-else-if ladder with syntax and sample program.

(OR)

(b) Write a C program to print Fibonacci series.

14. (a) Write a C program to multiply two matrices A, B and store the result in matrix C.

(OR)

(b) Write a C program to delete duplicate elements from an array of integers.

15. (a) Explain malloc () and calloc () memory management functions.

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(OR)

* *(b)* Illustrate the concept of input and output operations on files.

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PART—C

10×1=10

- Instructions :**
- (1) Answer the following question.
 - (2) The question carries **ten** marks.
 - (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.
- 16.** Explain how pointers can be used to access array elements. Write a C program to compute sum of elements stored in an array using pointers.

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